

Unified Watershed Assessment and Setting of Restoration Priorities for Pennsylvania

Introduction

The Commonwealth has made a significant investment in assessing the condition of its 83,000 miles of free-flowing surface waters and publicly accessible lakes. The Department of Environmental Protection, USDA Natural Resource Conservation Service and cooperating agencies are in the midst of significant initiatives to assess all surface waters by the year 2002 and involve stakeholders in locally-led processes to identify local resource concerns. These efforts form the basis of the Commonwealth's submission of a unified watershed assessment and discussion of watershed restoration priorities.

Pennsylvania has coordinated efforts between state environmental agencies and USDA to create a unified watershed assessment that identifies watersheds needing restoration (Category I), watersheds needing preventive action to sustain water quality (Category II), pristine or sensitive watersheds on federal or state lands (Category III) and watersheds with insufficient data to make an assessment (Category IV).

Pennsylvania has worked cooperatively with agencies, organizations and the public to define watershed restoration priorities. Defining watershed priorities for Category I, II, III and IV watersheds at the 8-digit hydrologic unit scale is only a first step. The 8-digit watershed is too large for accurate watershed priority setting or meaningful detailed watershed planning needed for restoration efforts. Pennsylvania has focused on analyzing watersheds conditions at the smaller state water plan level. By evaluating information and engaging the public at this smaller watershed scale, support and commitment for feasible watershed restoration that targets the highest priority areas within the eight digit watershed will be enhanced.

Pennsylvania's Unified Assessment Process

1998 Unified Assessment Submission

NRCS State Conservationist Janet Oertly and DEP's Deputy Secretary for Water Management, Dr. Hugh Archer convened an initial meeting on May 5, 1998. Over 150 stakeholders and agency representatives were invited. This meeting included an overview of the Clean Water Action Plan by Region III EPA staff and indepth discussions about sources of data, participating groups and handling of interstate waters. A list of attendees is found on pages 28 and 29.

To develop its first unified assessment, Pennsylvania has focused on existing assessment processes and information, including the Department's Unassessed Waters Initiative, 305(b) Report, 303(d) List, the locally established geographic priority areas submitted to NRCS for consideration for EQIP funding and other agency initiatives.

Discussions for setting watershed priorities began on June 5 when a request for priorities and watershed data was sent to the participants of the May 5 meeting. Program priorities and

initiatives submitted by various agencies are summarized into a matrix to determine watersheds with the largest number of agency programs and potential capacity to conduct additional restoration activities.

A core group of 30 stakeholders met on July 27 to review the assessment data and discuss procedures for setting priority watersheds in each of the four watershed categories. On September 21, 1998 this same group of stakeholders met to review public and agency comments, interstate coordination and priority setting. Their recommendations are incorporated into Pennsylvania's final submission.

Public Participation and Comment

Beginning in August, the Commonwealth initiated a public participation process for the unified assessment and procedures for setting watershed priorities. Pennsylvania's assessment process was published in the *Pennsylvania Bulletin*, Department *Update* publication and world wide web site. It was sent to the Department's list of watershed groups, monitoring groups, Nonpoint Source Program mailing list and presented to the USDA State Technical Committee.

The Department received 23 written comments from a variety of agencies, conservation districts and watershed groups. A summary of their comments is attached as Appendix 4 on pages 32-34. Eight commentors recommended using a smaller watershed scale such as Pennsylvania's State Water Plan classification. Six commentors recommended certain watersheds for priority designation and three commentors provided additional watershed data.

Availability of Pennsylvania's October 1, 1998 Unified Watershed Assessment will be published in the *Pennsylvania Bulletin* with an additional 45 day public comment period. Comment will be requested on the recommended priorities and the development of watershed restoration action strategies.

Department staff are engaged in a significant outreach effort during September and October with 23 events planned. Six regional public meetings are scheduled along with regional roundtable sessions with county conservation districts. The Department is using these events to also solicit public comment on its Nonpoint Source Management Plan revision and the new state grant program, Watershed Restoration and Assistance Program (WRAP). A schedule of these activities is found in Appendix 3 on page 31.

Future Activities

Pennsylvania is committed to expanding and improving this process in the future. We plan to take a broader look at the various data sources over the next two years and will have substantial new water quality data from the unassessed waters initiative. Efforts to place all of the unified assessment data into a GIS format will continue.

Unassessed Waters Initiative

The Commonwealth's plan for achieving a comprehensive statewide assessment of its surface waters includes implementation of a program to evaluate all unassessed free-flowing streams. The Department has developed a strategy for these assessments which involves preliminary screening of each watershed followed by a field-level biological assessment. Full-scale field work for this unassessed waters project began in 1997. This is a cooperative effort, with assessments being conducted by the Department's six Field Offices, the Susquehanna River Basin Commission, the Interstate Commission on the Potomac River Basin, the Erie County Department of Health, and Bureau of Watershed Conservation staff. A total of ten (10) State Water Plan (SWP) Watersheds have been completed, and assessments have been initiated in eleven (11) more. These assessments have included sampling at more than 1300 stations.

The unassessed waters initiative uses a biological screening protocol to establish whether aquatic life uses are impaired. Where uses are found to be impaired, or where the screening does not yield definitive information, more detailed assessments will be conducted to identify the NPS and/or PS responsible for the problem. Biological screening is conducted on wadeable waters using a modification of EPA's Rapid Bioassessment Protocol (RBP) which includes field identification of benthic macroinvertebrates to the family level and an RBP habitat assessment. Each biological screening results in an Assessment Summary for input to the 305(b) assessment database and GIS that identifies waters with obvious water quality impairment and those with no obvious impairment.

In addition, future assessments will coordinate closely with Pennsylvania's Conservation Partnership initiative. The Partnership consists of the many conservation and resource management agencies and groups dedicated to the conservation and improvement of the Commonwealth's natural resources. Members of the partnership are working on several initiatives including improving funding and staffing, education and training, planning and program delivery and communication and outreach. As part of the planning goal for the partnership, a strong watershed emphasis is planned as a basis for collecting information, identifying local needs and priorities and working closely with watershed groups. It is expected that this watershed emphasis will be adopted in each county and that counties will work closely with the Department and other agencies, on an ongoing basis, to set local watershed priorities that will be fully integrated into the next unified assessment process.

Unified Watershed Assessment Analysis

The assessment utilizes the Commonwealth's 1998 305(b) report and 303(d) list and supporting data and information to analyze the status of assessment efforts and degree of impairment in each state water plan watershed. Total stream miles, miles assessed, miles impaired, % assessed and % impaired were summarized for each state water plan and 8-digit watershed. The data for each state water plan watershed was combined within each 8-digit watershed to develop a composite status for the larger 8-digit watershed (Appendix 1, page 25). A list of all watersheds within the state, aggregated to the 8-digit HUC level and State Water Plan is found on pages 7 thru 16 (Table 1).

The State Water Plan was developed as a tool to guide the management of Commonwealth waters on a comprehensive and coordinated basis. Twenty subbasins were delineated across the Commonwealth based on water resources investigations for the Water Resources Inventory Report. Within each of the twenty subbasins, 104 smaller watersheds ranging in stream miles from 155 to 1798 have been delineated. The state water plan watersheds are approximately half the area of the 8-digit HUC Watersheds. The state water plan watersheds have been edited to ensure the all flow is within the watershed. The state watershed boundaries directly overlay the small shed named stream level coverage made by USGS. Correlation between the SWP and 8-digit HUC are fairly consistent (Watershed Map, Page 6).

Category I watersheds are defined as those 8 digit watersheds in which more than 20% of the watershed has been assessed with 15% or greater impairment and those watersheds in which more than 10% of the watershed has been assessed and more than 50% of the waters have been found to be impaired. In addition, Category I watersheds defined as high priority for their potential to have NPS pollution problems are also included where the assessment data for the watershed is less than 10% of the total stream miles. This analysis and priority ranking was conducted in 1996 prior to initiating the Department's Unassessed Waters Initiative. Land cover, land use, water quality, abandoned mine drainage concerns and ground water data was used to make the prioritization. Using this method, there are 23 watersheds defined as Category I. They are listed in Table 1, page 7 and shown on page 6.

Category II watersheds are defined as those with more than 20% of the watershed assessed and less than 15% of those stream miles found to be impaired. These watersheds will need continued implementation of core clean water programs to maintain water quality and conserve natural resources. There are 4 Category II watersheds, listed in Table 1, page 11 and shown on page 6.

There are 3 Category III watersheds in Pennsylvania at the 8-digit hydrologic unit scale. These watersheds contain substantial lands owned and managed by the state and federal government and contain many watersheds designated as special protection waters by the Commonwealth. There are 3 Category III watersheds listed in Table 1, page 12 and shown on page 6.

Category IV watersheds are those watersheds with less than 10% of the waters assessed or 10-20% assessed with less than 50% impairment. As Pennsylvania's Unassessed Waters Initiative proceeds, the number Class IV watersheds will drop significantly over the next four years. There are 28 watersheds, listed in Table 1, page 13 and shown on page 6.

Interstate Coordination

There are a number of 8-digit watersheds which are shared with adjacent states. Many of these watersheds contain only small amounts of land area for which separate distinct water quality data is not available or separated from the larger data base organized by state water plan. In order to improve coordination and implementation efforts with adjacent states, the Department has changed the watershed classification status of many of these shared watersheds from

Category IV to the classification given for the corresponding state water plan watershed. These watersheds include 2060002 Chester-Sassafras, 2060003 Gunpowder, 5030103 Mahoning, 5030104 Beaver.

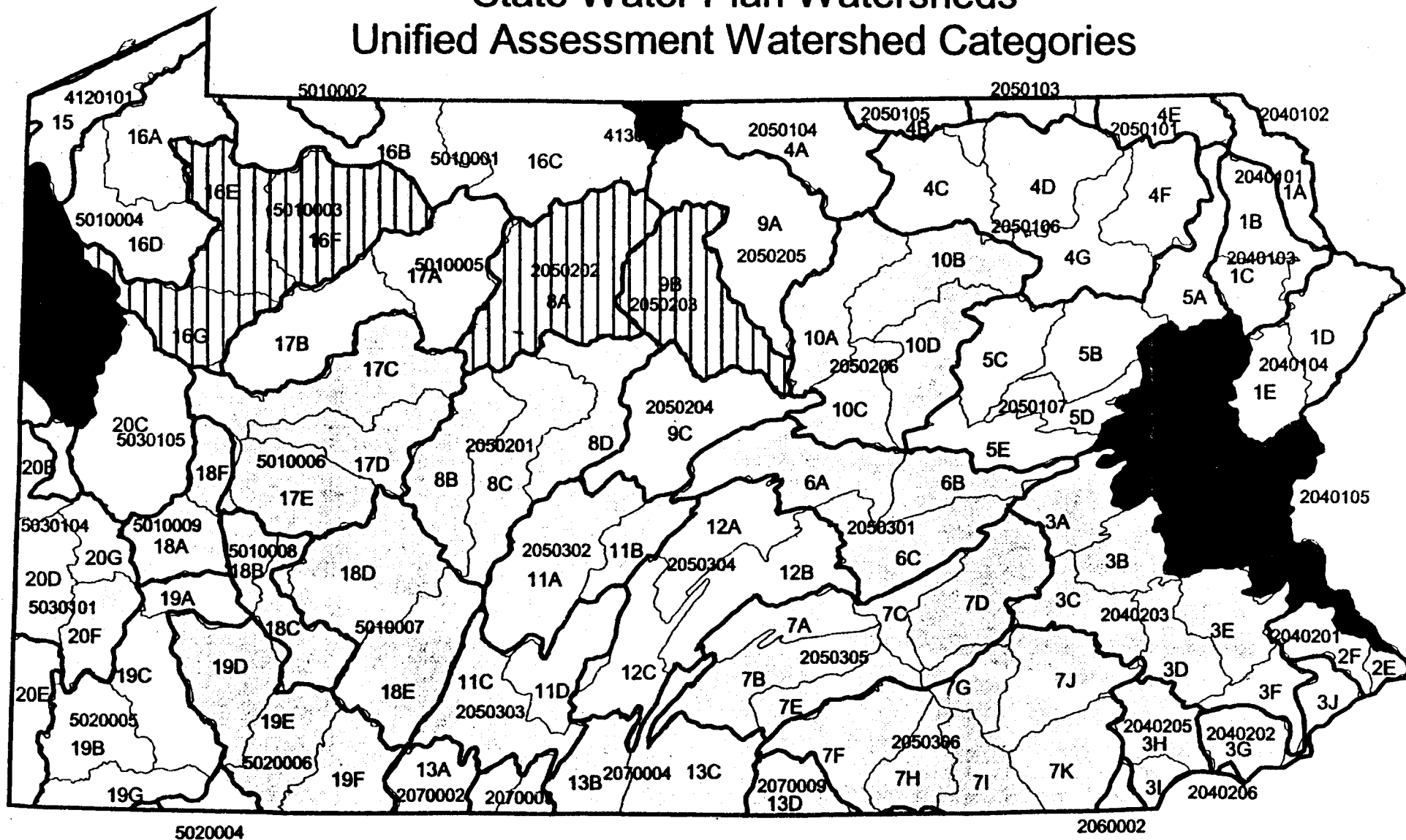
Program staff obtained the draft Unified Watershed Assessments from New York, New Jersey, Delaware, Maryland, West Virginia and Ohio. Table 2 on Page 17 summarizes the classification status and priority information for those watersheds shared with neighboring states. Many of the watersheds have the same classification in each state (50%). Many of the watersheds shared with New York state differ in classification because of the varying status of assessment efforts in each state. As Pennsylvania's Unassessed Waters Initiative progresses, many of the Category IV watersheds across northern Pennsylvania will be reclassified to Categories I, II or III. Pennsylvania will utilize the existing river basin commissions to coordinate restoration efforts with adjacent states. As project selection guidelines for the 319 grant program are developed, recognition and priority will be given to watershed initiatives which include multi-state participation by citizens, watershed groups and agencies.

Commonwealth of Pennsylvania

8 Digit HUC Watersheds

State Water Plan Watersheds

Unified Assessment Watershed Categories



- State Water Plan Boundaries
- HUC Watersheds
- Category 1
- Category 2
- Category 3
- Category 4

Table 1. Unified Watershed Assessment, Watershed Category Summary by 8 Digit HUC Code and State Water Plan

	8 Digit HUC Code	State Water Plan	State Priority
Category I Watersheds:	Restoration		
2040201	Neshaminy	Neshaminy Cr Pidcock-Mill Crs	2F Restoration 2E Restoration/Assessment
2040202	Lower Delaware	Poquessing-Pennypack Crs Darby-Crum Crs	3J Restoration 3G Restoration/Continuous Implementation
2040203	Schuylkill	Upper Schuylkill R Manatawny/French Crs Lower Schuylkill R Maiden Cr Tulpehocken Cr Perkiomen Cr	3A Restoration 3D Restoration 3F Restoration 3B Restoration/Assessment 3C Restoration/Assessment 3E Restoration/Assessment
2040205	Brandywine-Christina	Brandywine Cr White Clay Cr	3H Restoration 3I Restoration
2050201	Upper W. Br. Susquehanna	Clearfield Cr Chest-Anderson Crs Moshannon-Mosquito Crs	8C Restoration/Assessment 8B Restoration/Assessment 8D Restoration/Assessment

	8 Digit HUC Code	State Water Plan	State Priority	
2050206	L. W. Br. Susquehanna	Muncy-Chilisquaque Crs	10D	Restoration
		Antes-Lycoming Cr	10A	Restoration/Assessment
		Loyalsock Cr	10B	Restoration/Assessment
		White Deer-Buffalo Crs	10C	Restoration/Assessment
2050301	Lower Susquehanna – Penns	Mahanoy – Shamokin Crs	6B	Restoration
		Mahantango – Wiconisco Crs	6C	Restoration
		Penns – Middle Crs	6A	Restoration/Assessment
2050302	Upper Juniata	Frankstown Br., Little Juniata R	11A	Restoration
		Crooked, Standing Stone Crs	11B	Restoration/Assessment
2050303	Raystown	Dunning Cr	11C	Restoration
		Raystown Br., Juniata R	11D	Restoration/Continuous Implementation
2050305	Lower Susquehanna – Swatara	Conodoquinet Cr	7B	Restoration
		Clark – Paxton Crs	7C	Restoration
		Swatara Cr	7D	Restoration
		Yellow Breeches Cr	7E	Restoration
		Sherman Cr	7A	Restoration/Assessment

	8 Digit HUC Code	State Water Plan	State Priority
2050306	Lower Susquehanna	Conewago Cr	7F Restoration
		Chickies Cr	7G Restoration
		Codorus Cr	7H Restoration
		Kreutz – Muddy Crs	7I Restoration
		Conestoga R	7J Restoration
		Pequea – Octoraro Crs	7K Restoration
2060002	Chester-Sassafras	Pequea-Octoraro Crs	7K Restoration
2060003	Gunpowder	Codorus Cr	7H Restoration
2070004	Conococheague	Conococheague – Antietam Crs	13C Restoration
		Licking – Tonoloway Crs	13B Restoration/Assessment
2070009	Monocacy	Marsh- Rock Cr	13D Restoration
5010006	Middle Allegheny – Redbank	Redbank Cr	17C Restoration
		Mahoning Cr	17D Restoration/Assessment
		Cowanshannock – Crooked Crs	17E Restoration
5010007	Conemaugh	Conemaugh – Blacklick Crs	18D Restoration
		Stony Creek R	18E Restoration/Assessment

	8 Digit HUC Code	State Water Plan	State Priority
5010008	Kiskiminetas	Kiskiminetas Cr Loyalhanna Cr	18B Restoration 18C Restoration/Assessment
5010009	Lower Allegheny	Lower Allegheny R Buffalo Cr	18A Restoration 18F Restoration
5020006	Youghiogheny	Lower Youghiogheny R Upper Youghiogheny R Casselman R	19D Restoration 19E Restoration/Assessment 19F Restoration/Assessment
5030101	Upper Ohio	Raccoon Cr Beaver R Chartiers Cr Upper Ohio R	20D Restoration 20B Restoration 20F Restoration 20G Restoration
5030103	Mahoning	Beaver R	20B Restoration
5030104	Beaver	Beaver R	20B Restoration

	8 Digit HUC Code	State Water Plan	State Priority
Category II Watersheds:	Continuous Program Implementation		
2040106	Lehigh	Middle Lehigh R Lower Lehigh R Upper Lehigh R	2B Continuous Implementation/Restoration 2C Continuous Implementation 2A Continuous Implementation/Assessment
2040105	Middle Delaware	Jacoby – Bushkill Crs Cooks – Tohickon Crs	1F Continuous Implementation 2D Continuous Implementation
4130002	Upper Genesee	Genesee R	14 Continuous Implementation
5030102	Shenango	Shenango R	20A Continuous Implementation

	8 Digit HUC Code	State Water Plan	State Priority
Category III Watersheds:	Pristine/Sensitive Conditions on	Federal/State Lands	
2050202	Sinnemahoning	Sinnemahoning Cr	8A Protection
2050203	Middle W. Br. Susquehanna	Kettle Cr	9B Protection
5010003	Middle Allegheny – Tionesta	Tionesta Cr	16F Protection
		Oil Cr	16E Protection/Assessment
		Sandy Cr	16G Protection/Assessment

	8 Digit HUC Code	State Water Plan		State Priority
Category IV Watersheds:	Assessment			
2040101	Upper Delaware	Shehawhen – Rattlesnake Crs	1A	Assessment
2040102	E. Br. Delaware	Shehawhen – Rattlesnake Crs	1A	Assessment
2040103	Lackawaxen	Lackawaxen R.	1B	Assessment
		Wallenpaupack Cr	1C	Assessment
2040104	Middle Delaware-Mongaup-Brodhead	Shohola – Bushkill Crs	1D	Assessment
		Brodhead Cr	1E	Assessment
2040204	Delaware Bay No corresponding SWP watershed			
2050101	Upper Susquehanna	Great Bend Susquehanna	4E	Assessment
2050103	Owego	Wappasening – Chemung R	4B	Assessment
2050104	Tioga	Tioga – Cowanesque R	4A	Assessment

	8 Digit HUC Code	State Water Plan	State Priority	
2050105	Chemung	Wappasening – Chemung R	4B	Assessment
2050106	Upper Susquehanna – Tunkhannock	Sugar – Towanda Crs	4C	Assessment
		Wysox – Wyalusing Crs	4D	Assessment
		Tunkhannock Cr	4F	Assessment
		Mehoopany – Bowman Crs	4G	Assessment
2050107	Upper Susquehanna – Lackawanna	Nescopeck Cr	5D	Assessment/Restoration
		Catawissa Cr	5E	Assessment/Restoration
		Lackawanna Cr	5A	Assessment
		Wopwallopen Cr	5B	Assessment
		Fishing Cr	5C	Assessment
2050204	Bald Eagle	Bald Eagle Cr	9C	Assessment
2050205	Pine	Pine Cr	9A	Assessment
2050304	Lower Juniata	Kishacoquillas Cr	12A	Assessment
		Tuscarora – Buffalo Crs	12B	Assessment
		Aughwick Cr	12C	Assessment
2070002	N. Br. Potomac	Wills – Town Crs	13A	Assessment

	8 Digit HUC Code	State Water Plan	State Priority	
2070003	Cacapon	Wills – Town Crs	13A	Assessment
		Licking – Tonoloway Crs	13B	Assessment
4110003	Ashtabula	Lake Erie	15	Assessment
4120101	Chautauqua	Lake Erie	15	Assessment
4120200	Lake Erie	Lake Erie	15	Assessment
5010001	Upper Allegheny	Kinzua – Brokenstraw Crs	16B	Assessment
		Potato – Oswayo Crs	16C	Assessment
5010002	Conewango	Kinzua – Brokenstraw Crs	16B	Assessment
5010004	French	Upper French Cr	16A	Assessment
		Lower French Cr	16D	Assessment
5010005	Clarion	Upper Clarion R	17A	Assessment
		Lower Clarion R	17B	Assessment
5020003	Upper Monangahela	Upper Monangahela	19G	Assessment
5020004	Cheat	Upper Monangahela	19G	Assessment

	8 Digit HUC Code	State Water Plan	State Priority	
5030105	Connoquenessing	Slippery Rock Cr	20C	Assessment
5030106	Upper Ohio – Wheeling	Wheeling – Buffalo Crs	20E	Assessment
5020005	Lower Monangahela	Turtle Cr	19A	Assessment/Restoration
		Tennile Cr	19B	Assessment
		Middle Monongahela/Redstone	19C	Assessment
		Upper Monongahela/Whiteley	19G	Assessment

Table 2. Unified Assessment Status – Adjacent States to Pennsylvania

State	8 Digit HUC Code	Watershed Name	Pa. SWP Code	Pa. Class	State Class
New York*	4120101	Chautauqua	15	IV	II
	5010002	Conewango	16B	IV	II
	✓ 4130002	Genessee	14	II	II
	2050103	Owego	4B	IV	II
	5010004	French	16A, 16D	IV	II
	5010001	Upper Allegheny	16B, 16C	IV	II
	2050104	Tioga	4A	IV	II
	2050105	Chemung	4B	IV	II
	2050101	Upper Susquehanna	4E	IV	II
	2040101	Upper Delaware	1A	IV	I
Ohio*	4110003	Ashtabula	15	IV	I
	5030103	Mahoning	20B	I	I
	5030102	Shenango	20A	II	I
	5030104	Beaver	20B	I	I
	5030101	Upper Ohio	20D, F, G	I	I
West Virginia	5030101	Upper Ohio	20D, F, G	I	I
	5030106	Upper Ohio-Wheeling	20E	IV	IV
	5020006	Youghiogheny	19D, E, F	I	I
	2070002	North Branch Potomac	13A	IV	I P
	5020003	Upper Monongahela	19G	IV	I
	5020004	Cheat	19G	IV	I P
Maryland	5020006	Youghiogheny	19D, E, F	I	I P
	2070002	North Branch Potomac	13A	IV	I P
	2070003	Cacapon	13B	IV	III
	2070004	Conococheague	13B, 13C	I, IV	I P
	2070009	Monocacy	13D	I	I P
	2060003	Gunpowder	7H	I	I P
	2050306	Lower Susquehanna	7F, G, H, I, J, K	I	III
	2060002	Chester/Sassafras	7K	I	I P
	2040205	Brandywine/Christina	3H, 3I	I	III
Delaware	2040205	Brandywine/Christina	3H, 3I	I	I P
	2060002	Chester/Sassafras	7K	I	I
New Jersey	2040201	Neshaminy/Crosswicks	2F	I	I Level 2 P
	2040106	Lehigh	2A, B, C	I, II, IV	
	2040202	Lower Delaware	3G, 3J	II, I	I Level 1 P
	2040104	Middle Delaware/Mongaup/ Brodhead	1E, 1D	IV	I Level 2 P
	2040105	Middle Delaware/Musconetcong	1F, 2D	II, IV	I Level 1 P

*No priorities set in August 1 submission to EPA

✓Watersheds in bold indicate same watershed classification with adjacent state

Discussion of Restoration Priority Setting

On June 5, 1998 State Conservationist Janet Oertly sent a request for information to the participants at the May 5 stakeholder meeting. She requested available data and priority information located by watershed. Table 3 summarizes water quality impairment, agency priorities and programs and local watershed groups organized by 8-digit and state water plan watersheds, prepared from the submissions received, is shown on pages 19 and 20.

A total of eleven program or data categories representing a variety of watershed related initiatives were considered and discussed by the core group on July 27. A review of the data at the state water plan level within an 8-digit watershed illustrates the variety of available data and initiatives within the 8-digit watershed scale. Because Pennsylvania's comprehensive assessment initiative is only in the second year of a multiyear effort, there is, at this time, significant disparity in % of stream miles assessed and total miles impaired between watersheds, depending on the status of the new assessment initiative. In addition, many agency programs priorities and watershed groups are concentrated in the smaller state water plan watersheds.

The core group which met on July 27 recommended consideration of additional criteria for selecting priority watersheds and suggested that this process be dynamic, subject to refinement based on public participation and evaluation of additional data.

As discussed previously, the Department received public comment that provided additional data and suggestions for priority setting. Updated information is included in a revised Table 3. Additional data was received and included from the Chesapeake Bay Community Watershed Initiative, American Heritage Rivers Program, Clean Lakes Program and DEP priority watersheds with water supplies with excessive nitrate concentrations.

Pennsylvania has identified 18 priority watersheds for restoration during FY 99-2000. The remaining 5 Category I watersheds will be priorities for attention in FY 2001 and beyond. The priority setting process considered the information presented in Table 3 with emphasis on the extent of water quality impairment, agency support and local interest and participation. The 23 Category I watersheds were ranked from 1 to 23 in each category. A watershed that ranks 1 in a category would have the highest % of assessed stream miles as impaired, the most agency support or the most local interest. Rankings in the three categories were totaled for each watershed and a composite score established. Scores ranged from 11 to 52 for the Category I watersheds (Table 5, page 22).

Seventy-five percent of the Category I watersheds are priorities for FY 99/2000. An additional 4 Category I watersheds which are shared with adjacent states that have determined their watersheds to be Category I priorities are also included to improve interstate coordination and develop cooperative initiatives (Table 6, page 23).

The Department will use the results of the unified assessment to select watershed priorities for various program activities. For example, the third year of the Department's unassessed waters initiative may target those Category IV watersheds that have relatively high levels of impairment noted from past studies.

Table 3. Unified Assessment Category I Watersheds

HUC Name & Number	SWP No.	Stream Name	Total miles impaired by NPS	% of assessed impaired	EQIP NRCS	EQIP NRCS	PL566-NRCS	PL566-NRCS	AMD Initiatives	DCNR Cons Planning Grants	DCNR Conserv. Registry	Agency Priorities	Locally Led Process	Local Grassroots Wshed Assns	Total Number Interest Groups	319 Non-AMD	Ches. Bay Small Wshed Grants	Clean Lakes Projects	BWSM Priority Watersheds	Total entries
					A	P	A	P												
2040201	02E	Delaware R/ Pidcock Ck/ Mill Ck	20	36						2		1	S1	1	5	1				10
Neshaminy Ck	02F	Neshaminy Ck	44	76	1		1			3	1	1		1	4	3		2		17
2040202	03G	Darby/Crum Ck	17	12						3		2	S1	4	4				X	14
Lower Delaware R	03J	Pennypack Ck	25	84								1		1	2	2			X	7
2040203	03A	Upper Schuylkill R	105	76						1			S1		3	1				5
Schuylkill R	03B	Maiden Ck	1	5		1				1					2	2		1	X	8
	03C	Tulpehocken Ck	38	46		1	1			4	1				2	4			X	14
	03D	French/Manatawny Ck	39	46						4	1			1	7	2			X	16
	03E	Perkiomen Ck	16	29						2		1		1	4	2		1		11
	03F	Lower Schuylkill R/ Wissahickon	76	67						1		3		2	6	1			X	14
2040205	03H	Brandywine Ck	98	19			1					1		1	2	3			X	9
Brandywine/Christina R	03I	White Clay Ck	111	67		1	1			1		2		3	3	2			X	14
2050201	08B	Ches/ Anderson Ck	53	88					1	1				2	3	1			X	9
Upper West Branch	08C	Clearfield Ck	128	94						1				1	3	1			X	7
Susquehanna R	08D	Moshannon/ Mosquito Ck	34	53					1						3	1	1			6
2050206	10A	Antes/ Lycoming Ck	5	11		1							S2		2	1				4
Lower West Branch	10B	Loyalsock Ck	8	15		1			1						2	1				5
Susquehanna R	10C	White Deer/ Buffalo Ck	4	10											2	1				3
	10D	Muncy/ Chilisquaque Ck	311	37	1										3	1			X	6
2050301	06A	Penns/ Middle Ck			1	1							S1		2				X	5
Lower Susquehanna R/	06B	Mahanoy/ Shamokin Ck	109	100	1			1	1			1		1	2					7
Penns Ck	06C	Mahantango/ Wiconisco Ck	167	22		2			1	1		2		1	3					10
2050302	11A	Frankstown Br/ Little Juniata R	46	86			1	1	3	1			S1	1	5	1	1			14
Upper Juniata R	11B	Crooked/ Standing Stone Ck								1					3	1				5
2050303	11C	Dunning Ck	18	6		1	1			1			S1		3	1				7
Raystown Branch	11D	Raystown Branch Juniata R	29	87		1			4	1				1	5	1				13
2050305	07A	Sherman Ck	27	78		2							S1		2					4
Lower Susquehanna R/	07B	Conodoguinet Ck	207	28	1					2		1		1	6	1	1		X	14
Swatara Ck	07C	Clark/ Paxton Ck	45	23											2					2
	07D	Swatara Ck	213	53		1			5	1				2	7				X	17
	07E	Yellow Breeches Ck	83	21		1								1	4				X	7
2050306	07F	Conewago Ck (West)	3	13									S2		4	1		1	X	7
Lower Susquehanna R	07G	Chickies Ck	137	38	1										5	1				7
	07H	Codorus Ck	30	100	1					1		1		2	5	2	1		X	14
	07I	Kreutz/ Muddy Ck	9	100		1								1	4				X	7
	07J	Conestoga R	33	91		1				1		1		2	5	2	2		X	15
	07K	Pequea/ Octoraro Ck	22	46		2				1				4	6	2	1		X	17
2070004	13B	Licking/ Tonoloway Ck													2					2
Conococheague Ck	13C	Conococheague/ Antietam Ck	13	6		1									3				X	5
2070009	13D	Marsh/ Rock Ck	1	3	1								S2		2	1				4
Monocacy R																				0

Table 3. Unified Assessment Category I Watersheds

HUC Name & Number	SWP No.	Stream Name	Total miles impaired by NPS	% of assessed impaired	EQIP NRCS	EQIP NRCS	PL566-NRCS	PL566-NRCS	AMD Initiatives	DCNR Cons Planning Grants	DCNR Conserv. Registry	Agency Priorities	Locally Led Process	Local Grassroots Wshed Assns	Total Number Interest Groups	319 Non-AMD	Ches. Bay Small Wshed Grants	Clean Lakes Projects	BWSM Priority Watersheds	Total entries
					A	P	A	P												
5010006	17C	Redbank Ck	87	37			1		2				S2			2				5
Middle Allegheny R/	17D	Mahoning Ck	35	77		1			1	1	1					2				6
Redbank Ck	17E	Cowanshannock/ Crooked Ck	26	53	1				1	1		1		2	2	2				10
5010007	18D	Conemaugh R/ Blacklick Ck	60	79				2	3	1		1		2	4	1			X	15
Conemaugh R	18E	Stony Creek R	53	57		1	1		10	1		1		1	2	2				19
5010008	18B	Kiskiminetas R	34	79						1			NR	2	2	1				6
Kiskiminetas R	18C	Loyalhanna Ck	38	37		1	1		4	1				1	3	1				12
5010009	18A	Lower Allegheny R	82	51									NR	1	3	1				5
Lower Allegheny R	18F	Buffalo Ck				1			1						2	1				5
5020006	19D	Lower Youghiogheny R/ Sawickley Ck	39	85	1				3	1	1		S1	2	3	2				13
Youghiogheny R	19E	Upper Youghiogheny R/ Indian Ck	25	37			1	1	3	2				2	2	1				12
	19F	Casselman R	14	87						1						1				2
5030101	20B	Beaver R	18	90					1				S2							1
Upper Ohio R	20D	Raccoon Ck	53	66					1					1	1					3
	20F	Chartiers Ck	339	82		1			2	1				1	1					6
	20G	Upper Ohio R	64	85		1			1	1		1		2	2					8
Totals			3292		10	25	10	5	50	47	5	22		52	169	61	7	5	23	491

Table 4. Data Sources for Setting Priority Watersheds

1. Total miles impaired by NPS – DEP 305(b) Report and 303(d) List of Impaired Waters, 1998 data.
2. Percentage of assessed miles by watershed found as impaired – DEP 305(b) Report and 303(d) List of Impaired Waters, 1998 data.
3. EQIP – NRCS – Environmental Quality Incentives Program by geographic area.
A = Authorized
P = Planned
4. PL 566 – NRCS – Small Watershed Program Projects.
A = Authorized
P = Planned
5. AMD Initiatives – Includes watershed projects and demonstration sites as well as DEP mining-related watershed initiatives.
6. DCNR Rivers Conservation Planning Grants – List of grants awarded by DCNR for developing a rivers conservation plan.
7. DCNR Conservation Registry – DCNR list of watersheds with approved conservation plans eligible for implementation funds.
8. Agency Priorities – Priorities received from SRBC, DRBC, DEP Regional Offices and US Army Corps of Engineers, Pittsburgh office.
9. USDA – NRCS – 1997 Conservation Needs Assessment results by county applied to 8-digit watershed level. S1 = NPS rating severe and #1 concern. S2 = NPS rating severe and a concern. NR = no rating.
10. Local Grassroots Watershed Associations specifically interested in water quality issues.
11. Watershed Groups – DEP list of watershed groups, organized by local and regional or statewide identify.
12. NPS – 319 Watershed Projects – DEP list of watershed-related projects (implementation and assessment) from 319 grants (1993 to 1999).
13. Chesapeake Bay Program Community Watershed Initiative Grants.
14. Bureau of Water Supply Management priority watersheds – public surface and groundwater supplies with nitrate concentrations greater than 3.0 mg/l.
15. Total number of watershed projects or initiatives.

**Table 5. Ranking of Category I Watersheds by Percentage of Assessed Miles Impaired,
Agency Initiatives and Local Interest**

Watershed	% of Assessed Miles Impaired	Agency Initiatives	Local Interest	Total Rank Score
	Rank	Rank	Rank	
2040201 Neshaminy	7	4	12	23
2040202 Lower Delaware	15	7	2	24
2040203 Schuylkill	7	1	3	11
2040205 Brandywine	14	5	6	25
2050201 U. W. Br. Susquehanna	3	6	8	17
2050206 L. W. Br. Susquehanna	11	10	17	38
2050301 L. Susq./Penns	13	7	9	29
2050302 Upper Juniata	2	10	14	26
2050303 Raystown Br.	16	9	15	41
2050305 L. Susq./Swatara	12	2	4	18
2050306 L. Susquehanna	9	1	1	11
2070004 Conococheague	17	14	18	49
2070009 Monocacy	18	15	19	52
5010006 Middle Allegheny	10	8	13	31
5010007 Conemaugh	5	3	10	18
5010008 Kiskiminetas	1	12	11	24
5010009 Lower Allegheny	8	13	16	37
5020006 Youghiogheny	6	5	5	16
5030101 Upper Ohio	4	11	7	22

Table 6. Category I 8-Digit HUC Code Watershed Priorities for FY 99/2000

	Watershed	Rank Score
2040203	Schuylkill	11
2050306	Lower Susquehanna	11
2060002	Chester-Sassafras	
2060003	Gunpowder	
5020006	Youghiogheny	16
2050201	Upper West Branch Susquehanna	17
2050305	Lower Susquehanna/Swatara	18
5010007	Conemaugh	18
5030101	Upper Ohio	22
5030103	Mahoning	
5030104	Beaver	
2040201	Neshaminy	23
2040202	Lower Delaware	24
5010008	Kiskiminetas	24
2040205	Brandywine	25
2050302	Upper Juniata	29
5010006	Middle Allegheny	31
2050301	Lower Susquehanna/Penns	38

Category I 8-Digit HUC Code Watershed Priorities for FY 2001

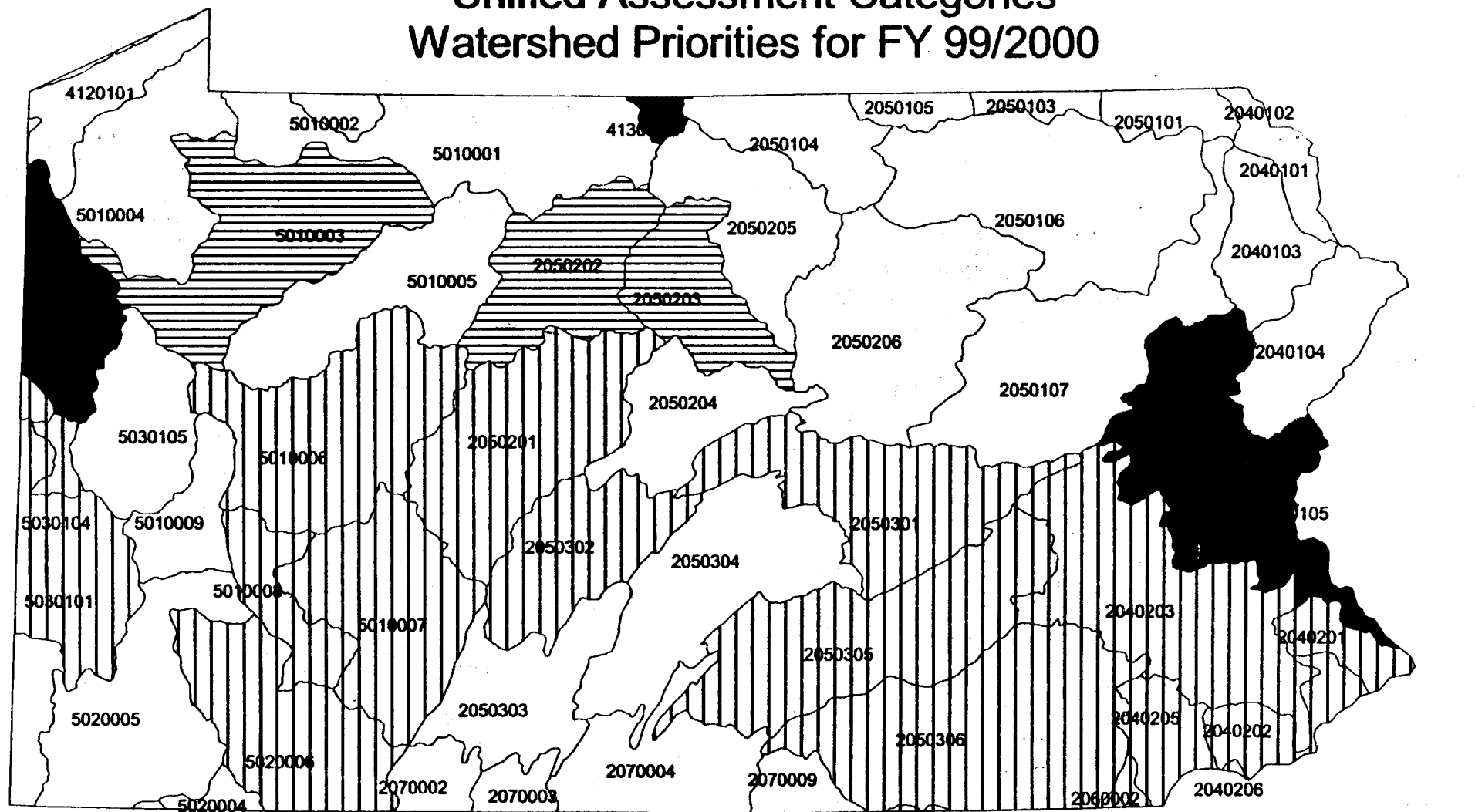
	Watershed	Rank Score
5010009	Lower Allegheny	37
2050206	Lower West Branch Susquehanna	38
2050303	Raystown Branch	41
2070004	Conococheague	49
2070009	Monocacy	52







Commonwealth of Pennsylvania

8 Digit HUC Watersheds

Unified Assessment Categories

Watershed Priorities for FY 99/2000



-  Priority Watersheds
-  HUC Watersheds
-  Category 1
-  Category 2
-  Category 3
-  Category 4

Appendix 1. Summary of Watershed and Assessment Data

HUC	Sheds	Miles	Assessed	%assessed	Impaired	%impaired	Category
2040202	3G, 3J	617.3	178.0	28.8%	42.2	23.7%	1
	3G	462.0	148.2	32.1%	17.1	11.5%	2
	3J	155.3	29.8	19.2%	25.1	84.2%	1
2050305	7A,7B,7C,7D,7E	2971.7	1769.7	59.6%	575.8	32.5%	1
	7A	564.8	34.7	6.1%	27.0	77.8%	4
	7B	842.9	731.1	86.7%	207.0	28.3%	1
	7C	260.0	199.2	76.6%	45.0	22.6%	1
	7D	899.7	400.5	44.5%	213.5	53.3%	1
	7E	404.2	404.2	100.0%	83.5	20.7%	1
5030101	20B,20D,20F,20G	2247.6	592.3	26.4%	475.1	80.2%	1
	20B	555.0	20.5	3.7%	18.5	90.2%	1
	20D	752.2	80.5	10.7%	53.4	66.3%	1
	20F	559.2	416.5	74.5%	339.5	81.5%	1
	20G	381.2	74.8	19.6%	63.7	85.2%	1
2050301	6A,6B,6C	2551.8	898.9	35.2%	276.3	30.7%	1
	6A	1090.6	24.1	2.2%	0.0	0.0%	4
	6B	502.8	108.8	21.6%	108.8	100.0%	1
	6C	958.4	766.0	79.9%	167.5	21.9%	1
2050206	10A,10B,10C,10D	3379.9	977.3	28.9%	327.4	33.5%	1
	10A	900.7	43.8	4.9%	4.7	10.7%	4
	10B	920.3	53.1	5.8%	7.7	14.5%	4
	10C	633.0	41.8	6.6%	4.2	10.0%	4
	10D	925.9	838.6	90.6%	310.8	37.1%	1
2040205	3H,3I	694.4	674.9	97.2%	209.0	31.0%	1
	3H	528.4	508.9	96.3%	97.6	19.2%	1
	3I	166.0	166.0	100.0%	111.4	67.1%	1
2040201	2F, 2E	1033.8	115.0	11.1%	64.5	56.1%	1
	2F	410.0	59.0	14.4%	44.5	75.4%	1
	2E	623.8	56.0	9.0%	20.0	35.7%	4
5010009	18A,18F	981.5	162.7	16.6%	81.8	50.3%	1
	18A	613.1	162.1	26.4%	81.8	50.5%	1
	18F	368.4	0.6	0.2%	0.0	0.0%	1
5010008	18B,18C	1185.7	145.9	12.3%	136.7	93.7%	1
	18b	376.9	42.5	11.3%	33.7	79.4%	1
	18c	808.8	103.4	12.8%	38.1	36.9%	4
2040203	3A,3B,3C,3D,3E,3F	2735.8	487.3	17.8%	273.9	56.2%	1
	3A	419.2	138.0	32.9%	104.8	75.9%	1
	3B	413.9	12.4	3.0%	0.6	4.8%	4
	3C	480.4	83.5	17.4%	38.3	45.9%	4
	3D	501.8	84.0	16.7%	38.6	46.0%	1
	3E	623.8	56.9	9.1%	16.3	28.6%	4
	3F	296.7	112.5	37.9%	75.2	66.9%	1

HUC	Sheds	Miles	Assessed	%assessed	Impaired	%impaired	Category
2050302	11A,11B	1759.8	53.3	3.0%	45.8	85.9%	1
	11A	1294.3	53.3	4.1%	45.8	85.9%	1
	11B	465.5	0.0	0.0%	0.0	0.0%	4
2050303	11C,11D	2222.2	345.7	15.6%	47.5	13.7%	1
	11C	1286.1	311.7	24.2%	18.0	5.8%	2
	11D	936.1	34.0	3.6%	29.5	86.8%	1
2050306	7F,7G,7H,7I,7J,7K	3958.8	508.9	12.9%	235.1	46.2%	1
	7F	1096.2	20.7	1.9%	2.7	13.0%	1
	7G	411.4	365.2	88.8%	137.9	37.8%	1
	7H	444.9	30.3	6.8%	30.3	100.0%	1
	7I	559.0	9.2	1.6%	9.2	100.0%	1
	7J	649.1	36.5	5.6%	33.3	91.2%	1
	7K	798.2	47.0	5.9%	21.7	46.2%	1
2070009	13d	526.4	52.5	10.0%	1.4	2.7%	1
5020005	19A,19B,19C,19G	3256.2	128.5	3.9%	105.5	82.1%	4
	19A	380.2	36.5	9.6%	36.4	99.7%	1
	19B	976.0	8.8	0.9%	8.8	100.0%	4
	19C	1103.2	46.0	4.2%	40.1	87.2%	4
	19G	796.8	37.3	4.7%	20.3	54.4%	4
5020006	19D,19E,19F	2452.9	131.0	5.3%	78.7	60.1%	1
	19D	970.8	45.7	4.7%	38.8	84.9%	1
	19E	797.0	68.6	8.6%	25.4	37.0%	4
	19F	685.1	16.7	2.4%	14.5	86.8%	4
5010006	17C,17D,17E	3733.2	333.8	8.9%	148.1	44.4%	1
	17C	1478.6	239.7	16.2%	87.2	36.4%	1
	17D	1021.7	45.7	4.5%	35.2	77.0%	4
	17E	1232.9	48.4	3.9%	25.7	53.1%	1
5010007	18D,18E	2653.4	167.4	6.3%	112.5	67.2%	1
	18D	1450.1	75.0	5.2%	59.5	79.3%	1
	18E	1203.3	92.42	7.7%	53.0	57.3%	4
2070004	13B,13C	2300.9	220.6	9.6%	12.6	5.7%	1
	13B	1085.3	0.0	0.0%	0.0	0.0%	4
	13C	1215.6	220.6	18.1%	12.6	5.7%	1
2040106	2A,2B,2C	1995.8	787.4	39.5%	104.2	13.2%	2
	2A	680.1	104.7	15.4%	10.2	9.7%	4
	2B	659.0	70.7	10.7%	49.1	69.4%	1
	2C	655.9	612.0	93.3%	45.5	7.4%	2
2040105	1F, 2D	590.7	300.0	50.8%	8.5	2.8%	2
	1F	251.7	237.1	94.2%	8.5	3.6%	2
	2D	339.2	63.0	18.6%	0.0	0.0%	4
5030102	20A	1603.9	1252.3	78.1%	77.7	6.2%	2

HUC	Sheds	Miles	Assessed	%assessed	Impaired	%impaired	Category
4130002	14	180.9	180.9	100.0%	23.5	13.0%	2
5010003	16E,16F,16G	3165.0	240.2	7.6%	34.1	14.2%	3
	16E	1092.9	132.0	12.1%	5.8	4.4%	4
	16F	1267.4	82.7	6.5%	2.8	3.4%	3
	16G	804.7	25.5	3.2%	25.5	100.0%	4
2050202	8a	1939.7	159.5	8.2%	79.1	49.6%	3
2050203	9b	1260.7	111.3	8.8%	17.4	15.6%	3
5010005	17A, 17B	2342.4	150.7	6.4%	135.4	89.8%	4
	17A	1196.2	23.4	2.0%	15.1	64.5%	4
	17B	1146.2	127.3	11.1%	120.3	94.5%	1
2050201	8B,8C,8D	2715.0	260.4	9.6%	214.9	82.5%	1
	8B	919.1	60.5	6.6%	53.4	88.3%	4
	8C	1038.7	135.7	13.1%	127.6	94.0%	1
	8D	757.2	64.2	8.5%	33.9	52.8%	4
2050107	5A,5B,5C,5D,5E	2576.5	212.6	8.3%	172.0	80.9%	4
	5A	513.9	17.7	3.5%	8.2	46.2%	4
	5B	521.7	44.5	8.5%	38.1	85.6%	4
	5C	640.7	11.5	1.8%	0.0	0.0%	4
	5D	354.9	48.5	13.7%	44.6	92.0%	1
	5E	545.3	90.4	16.6%	81.1	89.7%	1
4010003	15	1096.8	109.6	10.0%	4.1	3.7%	4
5010004	16A,16D	2842.1	121.8	4.3%	45.4	37.3%	4
	16A	1569.6	92.5	5.9%	35.7	38.6%	4
	16D	1272.5	29.3	2.3%	9.7	33.1%	4
5030105	20C	1588.2	59.3	3.7%	41.3	69.6%	4
5030106	20E	733.5	14.1	1.9%	0.0	0.0%	4
5010001	16B,16C	3285.5	216.5	6.6%	15.5	7.2%	4
	16B	1487.2	24.6	1.7%	0.0	0.0%	4
	16C	1798.3	192.0	10.7%	15.5	8.1%	4
2070002	13A	751.6	8.2	1.1%	8.2	100.0%	4
2050304	12A,12B,12C	2619.6	9.4	0.4%	0.0	0.0%	4
	12A	709.2	4.0	0.6%	0.0	0.0%	4
	12B	1099.4	5.4	0.5%	0.0	0.0%	4
	12C	811.0	0.0	0.0%	0.0	0.0%	4
2050204	9C	1226.2	91.6	7.5%	46.2	50.4%	4
2050205	9A	1609.5	201.9	12.5%	24.7	12.2%	4

HUC	Sheds	Miles	Assessed	%assessed	Impaired	%impaired	Category
2050105	4B	567.9	46.4	8.2%	12.4	26.7%	4
2050104	4A	1025.4	54.0	5.3%	21.2	39.3%	4
2050106	4C,4D,4F,4G	3249.9	125.6	3.9%	18.1	14.4%	4
	4C	824.8	27.9	3.4%	1.6	5.7%	4
	4D	1023.7	23.1	2.3%	5.7	24.7%	4
	4F	707.6	16.9	2.4%	0.0	0.0%	4
	4G	693.8	57.7	8.3%	10.7	18.5%	4
2050101	4E	590.1	13.1	2.2%	1.6	12.2%	4
2040103	1B,1C	1018.9	15.1	1.5%	0.0	0.0%	4
	1B	605.5	8.4	1.4%	0.0	0.0%	4
	1C	413.4	6.7	1.6%	0.0	0.0%	4
2040104	1D,1E	1176.4	108.4	9.2%	5.3	4.9%	4
	1D	686.3	72.7	10.6%	0.0	0.0%	4
	1E	490.9	35.6	7.3%	5.3	14.9%	4
2040101	1A	599.2	37.7	6.3%	15.0	39.8%	4

Appendix 2. Attendees at May 5, 1998, Clean Water Action Plan, Unified Assessment Meeting

<u>Name</u>	<u>Representing</u>
Andrew Weber	Chesapeake Bay Program
David Hamilton	Office of Surface Mining
Kurt Leitholf	Conservation and Natural Resources Advisory Council
Paul Swartz	Susquehanna River Basin Commission
Bonnie Smith	EPA Region III
Stacy Bower	Citizens Advisory Council
Rex Wright	USDA Farm Services Agency
Paul Wettlaufer	US Army Corps of Engineers
Mary Bender	PA Department of Agriculture
Lyle Forer	PA Department of Agriculture
Richard Kampf	EPA Region III
Carlton Haywood	Interstate Commission Potomac River Basin
Jeff Mahood	USDA, NRCS
Robin Heard	USDA, NRCS
Gary Smith	USDA, NRCS
Jay Howes	PA House Agricultural Committee
Jeff Clukey	Citizens Advisory Council
Gene Odato	DCNR, Bureau of Forestry
Ellen Roane	DCNR, Bureau of Forestry
Lyn Garling	Penn State University
John Walliser	Pennsylvania Environmental Council
Susan Fox	PA Association of Conservation Districts
John Arway	PA Fish and Boat Commission
Felicia Dailey	EPA
Ken Thornton	PA Department of Transportation
Don Hoskins	DCNR, Topographic and Geologic Survey
Sam Berkheiser	DCNR, Topographic and Geologic Survey
Chris Thomas	EPA
Vicky Binetti	EPA
Eric Maurer	EPA
Herbert Cole, Jr.	Penn State University
Tom Maslany	EPA
Karl Brown	State Conservation Commission
Lynn Slabicki	PA House Agricultural Committee
Dave Heicher	Susquehanna River Basin Commission
Dave Pollison	Delaware River Basin Commission
Roxane Palone	USDA, Forest Service
Glen Thomas	Governor's Office
Bill Wehry	USDA, Farm Service Agency, State Committee
Evelyn MacKnight	EPA
Jen Novak	Pennsylvania Environmental Council
Megan Milford	Pennsylvania Builders Association

Robin Mann
Ernie Giovannitti
Hugh Archer
Mike Sherman
Dean Auchenbach
Joe Lee
Cedric Karper
Pat Pingel
Leon Oberdick
Bernie Hoffnar
Bruce Holbrook
John Hines
Russ Wagner
Curt Pieper
Rod Fletcher
Jim Erb
Barb Sexton
Mike Conway
Don Welsh
Terry Fabian
Elmer Knaub
Gerald Cento
Forrest Underwood
Jim Walsh
Fred Marrocco
Deirdre Lehman
Ron Flory
Marita Spanitz
Stuart Gansell
Chris Allen
Bill Gast
Fran Koch

Seirra Club
Bureau of Abandoned Mine Reclamation
Water Management
Bureau of Watershed Conservation
Bureau of Water Quality Protection
Bureau of Water Supply Management
Bureau of Water Quality Protection
Bureau of Watershed Conservation
Southcentral Regional Office
Office of Pollution Prevention & Compliance Assistance
Bureau of Water Quality Protection
Office of River Basin Cooperation
Bureau of Watershed Conservation
Mineral Resources Deputate
Bureau of Mining and Reclamation
Bureau of Oil and Gas Management
Office of Policy and Communications
Bureau of Waterways Engineering
Federal Liaison
Field Operations Deputate
Southcentral Regional Office
Southeast Regional Office
Northwest Regional Office
Water Management Deputate
Bureau of Water Supply Management
Office of Pollution Prevention and Compliance Assistance
Bureau of Fiscal Management
Bureau of Fiscal Management
Bureau of Watershed Conservation
Office of Policy and Communications
Bureau of Watershed Conservation
Bureau of Watershed Conservation

Appendix 3. Public Information and Outreach Activities for Pennsylvania's Unified Watershed Assessment

<u>Date</u>	<u>Event</u>
9/3	DEP Chesapeake Bay Advisory Committee
9/9	DEP Water Resources Advisory Committee
9/17	Presentation to environmental/citizen groups Presentation to regional DEP operations staff
9/21	Unified assessment meeting
9/22	SE – Pennsylvania Association of Conservation District (PACD) Regional Directors meeting
9/23	DEP NW Regional Office – CD meeting – Presque Isle Presentation to regional DEP operations staff
9/24	NC – PACD Regional Directors meeting
9/28	DEP SE Regional Office – CD meeting – West Chester
10/5	State Conservation Commission/PACD Joint Annual Conference
10/13	NW PA Public Meeting
10/14	DEP NW Regional Office meeting and 319 tour SCRO – CD meeting – Altoona
10/15	DEP SW Regional Office meeting and 319 tour SW Public meeting
10/16	DEP SW Regional Office – CD meeting – Greensburg
10/20	DEP NE Regional Office – CD meeting – Wilkes Barre
10/21	SE PA Public Meeting – Regional Office
10/27	NE PA Public Meeting – Regional Office
10/28	SC PA Public Meeting – Regional Office
10/29	NC PA Public Meeting – Regional Office Pennsylvania Lake Management Society Conference

**Appendix 4. Draft Unified Assessment Comments
Public Comment Period August 15 – September 15**

	Commentor	Comments
1.	Mark Metzler Lancaster CD	DEP needs to express specifically what it is looking for and then ask/see/consider if locally-led watershed efforts can be delivered. DEP needs to make staff like regional biologists available to watershed groups. Consider assigning each county with a DEP watershed coordinator. The public's enthusiasm for such work maybe greatly influenced by the availability of adequate funding and technical support.
2.	Dan Hedderick Maryland Coordinator Maryland DNR	Provided information on Town Creek Ecosystem Management Project (Flintstone Creek, Bedford County).
3.	Gary Stokum Washington CD	Include 319 Ag Watershed Assessment for watershed 20D. Include watershed association Pigeon Creek/Pike Run for watershed 19C. Currently organizing Raccoon Creek Watershed Association in watershed 20D. Formally organized Washington County Watershed Alliance – add to list numbers for 20D, 20F, 20E, 19C and 19B.
4.	Lou Kopczyk Indiana CD	The 8 digit watershed level is too large for accurate priority setting or meaningful watershed planning. Recommends prioritization be based on the 11 digit hydrologic scale.
5.	Janie French Pa. Watershed Coordinator Canaan Valley Institute	Recommends prioritizing watersheds on an 11 digit HUC scale. Category IV watersheds should be listed as Category I until an adequate information base exists. Department should take a proactive approach to ID active watershed associations and include them in the decision making process. Priority should be given to those streams that have efficient local sponsorship. Importance of sponsorship needs to be recognized and supported at the state level.
6.	Allan W. Lilja Allegheny Mountain Chapter Trout Unlimited	New watershed association – Bennett Branch. Conducting assessment and monitoring activities. Provides watershed characteristics. Consider placing Bennett Branch on any listing deemed possible or appropriate for their situation.
7.	Clair Dumm Cambria Conservation District	Use 11 digit scale for watershed identification. Recommend that the Susquehanna River Assessment update Section 303(d) list as an amendment
8.	Robert Piper, Jr. West Branch Susquehanna	Use the Susquehanna River assessment to update the Section 303(d) list as an amendment. Use 11 digit scale for

	River Watershed	watershed identification. Do not understand why the watershed is funded for study yet is still ranked in the lowest category.
9.	Jackson Township Supervisors Millerton, PA 16936	Recommends Chemung Basin be a high priority for completing assessment. Points out additional studies of the Chemung which can provide additional data. Supports Department's Unassessed Waters Initiative.
10.	Harland Evans Seeley Creek Watershed Association	Wishes to participate in the unified assessment process. Named 2 other watershed groups for consideration. Requests the Chemung be made a high priority for completing the assessment.
11.	Bennett Branch Watershed Association	Background information about the watershed group and watershed. Supplied pH data indicating impact from abandoned mine drainage. Recommend Bennett Branch be listed as Category I.
12.	Rich Kadwill Montgomery County CD	No specific CD comments. Included NRCS comments. Wissahickon and Perkiomen Watersheds should be priorities. Concern that watersheds already approved under other programs will continue to receive the bulk of future appropriations.
13.	Rhonda Rumbaugh Lancaster County Academy	Agree with Conestoga River as a Category I watershed. Interested in helping with restoration and public relations.
14.	Len Lichnar Southern Alleghenies Conservancy	Names 3 other groups active in the Stonycreek River Watershed. Local and regional support is important in determining a priority for a watershed. Higher priority should be given to watersheds already seeing results from prior and current remediation efforts.
15.	SERO Water Program	Updated assessment information.
16.	NWRO Water Program	8-digit scale is too big. French Creek Watershed is an example that could be in several categories. Mahoning River should be considered for priority listing.
17.	EPA Region III	Draft submittal is consistent with the objectives of the UWA Framework. Need to define restoration priorities. Need to describe process for interstate coordination. Need to provide additional information on Pa's Unassessed Waters Initiative and State Water Plan definitions. Need to clarify data sources. Reminder to begin work on grant work plans.
18.	Charlie McGarrell Dauphin County CD	Recommends a landscape-scale classification variable be incorporated into Pa's process.
19.	Ross Orner, Jr. Clearfield County CD	Recommend 11 digit watershed scale instead of 8 digit scale. Concerned about their watershed ranked lowest for assessment.
20.	Paul Swartz Susquehanna River Basin Commission	Category I watersheds are a good mix from the major river basins. Must be able to show progress in correcting problems to justify/obtain increased funding. Large and small watershed groups are important sources of support and can serve as important partners in performing work. Would expect some

		Category II watersheds in the northern part of the river basin.
21.	Dave Densmore US Fish and Wildlife Service	Agrees with use of State Water Plan watersheds as the level for restoration priorities. Hope that efforts in agricultural watersheds will be given equal consideration with the well-established restoration efforts in AMD areas. Bentley Creek (Bradford County) is example of a channel restoration project in which the Service is participating. USFWS has a large riparian restoration effort that coordinates with EQIP and 319.
22.	Bernard McGurl Lackawanna River Corridor Association	Current procedures utilized by DEP and EPA are not sufficient to adequately assess water quality in Pa. watersheds. Pleased that DEP-BWC is collecting additional information to develop restoration priorities. Past assessments do not account for blatantly degraded reaches of waterway in generally attaining watersheds. Describes several Lackawanna River initiatives, including \$30 million project entitled "Lackawanna River Watershed 2000". Hopes the Lackawanna's prioritization is increased.
23.	Bill Plank	Recommends using State Water Plan Watersheds for planning. Need additional public participation on watershed scale, methods to dispense funds and scheduling of priority watersheds. High priority should be given to viable interstate restoration. Recommends using supplemental monies to encourage citizen participation in stream assessments. Noted lack of volunteers in planning meetings.
24.	Dan Greig Chester CD	Recommends separate categories for ag, urban and AMD NPS. Recommends Christina Basin be included as a high priority. Need standard format for submitting water quality information to the state.